

claims.

CLAIMS

What is claimed is:

- 5 1. A time-sharing multiplexing driving framework for image signals used for changing the turned-on orders of the control signal switches in a liquid crystal panel so as to make the turned-on orders of the two adjacent phases in the panel the same and make no joint space generated
10 in the panel, the framework comprising:

a plurality of wiring paths positioned on the panel for dividing the panel into a plurality of banks to be separately driven;

- 15 a plurality of control switches connected to the plurality of wiring paths, for controlling a plurality of pixel data voltages of a plurality of phases of the panel; and

- 20 a plurality of data line connectors connected to a plurality of data lines of the panel, and the number of the connectors being the same that of the wiring paths.

2. The time-sharing multiplexing driving framework for image signals of claim 1, wherein a plurality of phases are positioned on the panel.

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3. The time-sharing multiplexing driving framework for

image signals of claim 1, wherein the plurality of data line connectors are parallel to the plurality of wiring paths.

5 4. The time-sharing multiplexing driving framework for image signals of claim 1, wherein a plurality of first switch connected to the plurality of wiring paths are adjacent to each other and are turned on at the same time.

10 5. The time-sharing multiplexing driving framework for image signals of claim 1, wherein the plurality of wiring paths and the plurality of data line connectors are positioned on the same side of the panel.

15 6. The time-sharing multiplexing driving framework for image signals of claim 5, wherein the plurality of control switches connected to the plurality of wiring paths are sequentially turned on in opposite directions.

20 7. The time-sharing multiplexing driving framework for image signals of claim 1, wherein the plurality of wiring paths and the plurality of data line connectors are positioned on the two opposite sides of the panel.

8. The time-sharing multiplexing driving framework for image signals of claim 7, wherein the plurality of control switches connected to the plurality of wiring paths on the two opposite sides of the panel are separately connected
5 to the plurality of phases in the panel in an interlaced manner.

9. The time-sharing multiplexing driving framework for image signals of claim 7, wherein the plurality of control
10 switches connected to the plurality of wiring paths on the same side of the panel are sequentially turned on in opposite directions.

10. The time-sharing multiplexing driving framework for
15 image signals of claim 7, wherein the plurality of control switches connected to the plurality of wiring paths on the two opposite sides of the panel are turned on in the same direction.

20 11. A time-sharing multiplexing driving framework for image signals used for changing the turned-on orders of the control signal switches in a liquid crystal panel so as to make the turned-on orders of the two adjacent phases in the panel the same and make no joint space generated

in the panel, the framework comprising:

a plurality of wiring paths being a first wiring path,
a second wiring path, a third wiring path and a fourth
wiring path positioned on the same side of the panel and
5 separately driven by a plurality of banks;

a plurality of control switches connected to the
plurality of wiring paths, for controlling a plurality of
pixel data voltages of a plurality of phases in the panel;
and

10 a plurality of data line connectors connected to a
plurality of data lines of the panel, the number of the
connectors being the same as that of the wiring paths.

12. The time-sharing multiplexing driving framework for
15 image signals of claim 11, wherein the plurality of
phases connected to and controlled by the first switch of
the first wiring path and the first switch of the second
wiring path are adjacent to each other, and are turned on
at the same time.

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13. The time-sharing multiplexing driving framework for
image signals of claim 11, wherein the plurality of
phases connected to and controlled by the first switch of
the third wiring path and the first switch of the fourth

wiring path are adjacent to each other, and are turned on at the same time.

14. The time-sharing multiplexing driving framework for
5 image signals of claim 11, wherein the plurality of
phases connected to and controlled by the last switch of
the second wiring path and the last switch of the third
wiring path are adjacent to each other, and are turned on
at the same time.

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15. A time-sharing multiplexing driving framework for
image signals used for changing the turned-on orders of
the control signal switches in a liquid crystal panel so as
to make the turned-on orders of the two adjacent phases
15 in the panel the same and make no joint space generated
in the panel, the framework comprising:

a plurality of wiring paths being a first wiring path,
a second wiring path, a third wiring path and a fourth
wiring path evenly positioned on the two sides of the
20 panel and separately driven by a plurality of banks;

a plurality of control switches connected to the
plurality of wiring paths, for controlling a plurality of
pixel data voltages of a plurality of phases in the panel;
and

a plurality of data line connectors connected to a plurality of data lines of the panel, the number of the connectors being the same as that of the wiring paths.

5 16. The time-sharing multiplexing driving framework for image signals of claim 15, wherein the plurality of phases connected to and controlled by the first switch of the first wiring path and the first switch of the fourth wiring path are adjacent to each other, and are turned on
10 at the same time.

17. The time-sharing multiplexing driving framework for image signals of claim 15, wherein the plurality of phases connected to and controlled by the first switch of
15 the first wiring path and the first switch of the third wiring path are adjacent to each other, and are turned on at the same time.

18. The time-sharing multiplexing driving framework for
20 image signals of claim 15, wherein the plurality of phases connected to and controlled by the first switch of the second wiring path and the first switch of the fourth wiring path are adjacent to each other, and are turned on at the same time.

19. A time-sharing multiplexing driving framework for image signals used for changing the turned-on orders of the control signal switches in a liquid crystal panel so as
5 to make the turned-on orders of the two adjacent phases in the panel the same and make no joint space generated in the panel, the framework comprising:

a plurality of wiring paths being a first wiring path, a second wiring path, a third wiring path, a fourth wiring
10 path, a fifth wiring path, a sixth wiring path, a seventh wiring path and a eighth wiring path, evenly positioned on the two sides of the panel and separately driven by a plurality of banks;

a plurality of control switches connected to the
15 plurality of wiring paths, for controlling a plurality of pixel data voltages of a plurality of phases of the panel;
and

a plurality of data line connectors connected to a plurality of data lines of the panel, the number of the
20 connectors being the same as that of the wiring paths.

20. The time-sharing multiplexing driving framework for image signals of claim 19, wherein the plurality of phases connected to and controlled by the first switch of

the first wiring path and the first switch of the sixth wiring path are adjacent to each other, and are turned on at the same time.

5 21. The time-sharing multiplexing driving framework for image signals of claim 19, wherein the plurality of phases connected to and controlled by the last switch of the second wiring path and the last switch of the seventh wiring path are adjacent to each other, and are turned on
10 at the same time.

22. The time-sharing multiplexing driving framework for image signals of claim 19, wherein the plurality of phases connected to and controlled by the first switch of
15 the third wiring path and the first switch of the fourth wiring path are adjacent to each other, and are turned on at the same time.